

Applicant: James A. Proctor Jr.
Application No.: 09/997,732

REMARKS/ARGUMENTS

After the foregoing Amendment, claims 26-67 are currently pending in this application. Claims 1-36 have been cancelled without prejudice. Claims 37-39, 42-45, and 48-59 have been amended to more distinctly claim subject matter which the Applicant regards as the invention. New claims 60-67 have been added to more distinctly claim subject matter which the Applicant regards as the invention. Applicant submits that no new matter has been introduced into the application by these amendments.

Claim Rejections - 35 USC §103(a)

Claims 1, 5, 6, 20, 24, 37, 43, 48-50, and 52 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,366,786 to Norman (hereinafter "Norman") in view of U.S. Patent No. 6,212,175 to Harsch (hereinafter "Harsch") and further in view of U.S. Patent No. 5,841,768 to Ozluturk (hereinafter "Ozluturk"). This rejection is respectfully traversed.

Independent claims 37, 43, and 49 recite maintaining timing alignment between a subscriber unit and a remote wireless transceiver over a reverse link using idle mode signals transmitted during assigned time slots when the mobile

terminal is powered-on but not actively sending data. For example, amended claim 37 states:

said wireless transceiver configured to transmit an idle mode signal over the digital communications path based upon the time slot assignment during an idle mode connection wherein said wireless transceiver is powered on but not actively sending data so that the remote wireless transceiver can maintain timing alignment.

Applicant agrees that Norman does not disclose this feature. However, Harsch does not remedy this failure of the prior art to suggest or disclose the claimed invention.

The Examiner cites Figure 5 as a basis for the combination rejection. Figure 5 provides no details of transmitting an idle mode signal based upon a time slot assignment received from a remote wireless transceiver. Instead, Harsch teaches deploying keep alive packets from a subscriber unit to a server to prevent a server from terminating a connection with the subscriber unit.

In Harsch, a mobile communication unit deploys keep alive packets at selected times to reset a keep idle timer in a server. So long as the keep idle timer is periodically reset, a connection between the mobile communication unit and the server can be maintained as long as desired (see Harsch, abstract). After establishing a connection, the server sends keep alive probes to the mobile communication unit if no communication is received from the mobile communication unit before the keep idle timer expires. If no acknowledgement or

other communication is received in a predetermined period of time thereafter, the server ends the connection (see Harsch, column 11, lines 43-50).

The Examiner cites Harsch, Column 12, lines 3-42 as teaching the claimed transmission of idle mode signals based upon a time slot assignment. The Column 12 passage relates to maintaining an idle mode connection between a mobile communication unit and a server by periodically transmitting a keep alive packet. This keep alive packet functions in substantially the same manner as an acknowledgement to a keep alive probe from the server and resets the predetermined period of time allowed by the server for a given connection. In contrast, the claimed subscriber unit transmits an idle mode signal to a remote wireless terminal during an assigned time slot in order to keep maintain communication connection and ensure the subscriber unit maintains timing alignment. Unlike Harsh, the claimed invention transmits an idle mode signal to the remote wireless terminal to perform timing alignment for idle subscriber units. It is clear that Harsch does not teach a method for performing timing alignment, but instead only discloses a method for maintaining an inactive wireless connection.

Ozluturk teaches a CMDA communication system which utilizes the transmission of short codes from subscriber units to a base station to reduce the time required for the base station to detect the signal from a subscriber unit (see Ozluturk, column 1, lines 16-20). In contrast to the claimed invention, Ozluturk

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provides a method for establishing a connection between a handset and a base station and fails to disclose a method for maintaining a communication connection between an idle subscriber unit and a remote wireless transceiver. Accordingly, claim 37 is not obvious in view of Ozluturk.

Neither Harsch nor either of the other cited references disclose or suggest the claimed invention wherein idle mode signals are transmitted over a digital communications path based upon a time slot assignment during an idle mode connection so that a remote wireless transceiver can maintain timing alignment. Accordingly, the rejection should be withdrawn.

Claims 38-41 are dependent upon claim 37, which the Applicant believes is allowable over the cited prior art of record for the same reasons provided above.

With respect to claim 43, claim 43 is directed toward a CDMA user terminal configured to maintaining timing alignment with a remote wireless transceiver over an idle mode connection by transmitting synchronization signals. For the reasons presented above, it is respectfully submitted that claim 43 and dependent claims 44-48 are allowable over the cited prior art of record.

With respect to claim 49, claim 49 is directed toward a subscriber unit configured to maintain timing alignment with a remote wireless transceiver by transmitting idle mode signals over at least one subchannel within a radio frequency channel during an idle mode connection. For the reasons presented

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above, it is respectfully submitted that claim 49 and dependent claims 50-55 are allowable over the cited prior art of record.

Claim 56 stands rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,559,789 to Nakano (hereinafter "Nakano") in view of Harsch. This rejection is respectfully traversed.

It is respectfully submitted that the claimed invention is distinguishable from Harsch for the reasons provide above. Additionally, the Applicant agrees with the Examiner that Nakano does not teach "a wireless transceiver configured to transmit an idle mode signal to the remote wireless transceiver over the digital communications path based upon the time slot assignment during an idle mode connection wherein said wireless transceiver is powered on but not actively sending data so that the power control is maintained, a code phase lock is maintained, and timing alignment is maintained with the remote wireless transceiver" as recited in claim 56.

Therefore, it is respectfully submitted that claim 56 and dependent claims 57-59 are allowable over the cited prior art of record.

Based on the arguments presented above, withdrawal of the 35 U.S.C. §103(a) rejection of claims 37-59 is respectfully requested.

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Conclusion

If the Examiner believes that any additional minor formal matters need to be addressed in order to place this application in condition for allowance, or that a telephone interview will help to materially advance the prosecution of this application, the Examiner is invited to contact the undersigned by telephone at the Examiner's convenience.

In view of the foregoing amendment and remarks, Applicant respectfully submits that the present application, including claims 37 - 67, is in condition for allowance and a notice to that effect is respectfully requested.

Respectfully submitted,

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